SEQUENCE LISTING

<110> Chugai Seiyaku Kabushiki Kaisha, 5001, Iwamoto et <120> Cell Calcification Suppressing Proteins and Genes of the Proteins <130> chugai seiyaku kabushiki kaisha 5001

<140> 08/878,177 <141> 1997-06-18

<160> 7

<170> PatentIn Ver. 2.0

<210> 1 <211> 1447 <212> DNA <213> C-11 gene, c-erg gene w/ deletion, chicken DNA

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<213> protein sequence from C-11 gene

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Met Thr Ala Ser Ser Ser Ser Glu Tyr Gly Gln Thr Ser Lys Met Ser 35 40 45

Pro Arg Val Pro Gln Gln Asp Trp Leu Ser Gln Pro Pro Ala Arg Val 50 55 60

Thr Ile Lys Met Glu Cys Asn Pro Asn Gln Val Asn Gly Ser Arg Asn 65 70 75 80

Ser Pro Asp Asp Cys Ser Val Ala Lys Gly Gly Lys Met Val Ser Ser 85 90 95

Ser Asp Asn Val Gly Met Asn Tyr Gly Ser Tyr Met Glu Glu Lys His

Ile Pro Pro Pro Asn Met Thr Thr Asn Glu Arg Arg Val Ile Val Pro

Ala Asp Pro Thr Leu Trp Ser Thr Asp His Val Arg Gln Trp Leu Glu 130 135 140

Trp Ala Val Lys Glu Tyr Gly Leu Pro Asp Val Asp Ile Leu Leu Phe 145 150 155 160

Gln Asn Ile Asp Gly Lys Glu Leu Cys Lys Met Thr Lys Asp Asp Phe 165 170 175

Gln Arg Leu Thr Pro Ser Tyr Asn Ala Asp Ile Leu Leu Ser His Leu 180 185 190

His Tyr Leu Arg Glu Arg Gly Ala Thr Phe Ile Phe Pro Asn Thr Ser 195 200 205

Val Tyr Pro Glu Ala Thr Gln Arg Ile Thr Thr Arg Pro Asp Leu Pro 210 215 220

(e)

Tyr Glu Gln Ala Arg Arg Ser Ala Trp Thr Ser His Ser His Pro Thr 225 230 235 240

Gln Ser Lys Ala Thr Gln Pro Ser Ser Ser Thr Val Pro Lys Thr Glu 245 250 255

Asp Gln Arg Pro Gln Leu Asp Pro Tyr Gln Ile Leu Gly Pro Thr Ser 260 265 270

Ser Arg Leu Ala Asn Pro Gly Ser Gly Gln Ile Gln Leu Trp Gln Phe 275 280 285

Leu Leu Glu Leu Leu Ser Asp Ser Ser Asn Ser Asn Cys Ile Thr Trp 290 295 300

Glu Gly Thr Asn Gly Glu Phe Lys Met Thr Asp Pro Asp Glu Val Ala 305 310 315 320

Arg Arg Trp Gly Glu Arg Lys Ser Lys Pro Asn Met Asn Tyr Asp Lys 325 330 335

Leu Ser Arg Ala Leu Arg Tyr Tyr Tyr Asp Lys Asn Ile Met Thr Lys 340 345 350

Val His Gly Lys Arg Tyr Ala Tyr Lys Phe Asp Phe His Gly Ile Ala 355 360 365

Gln Ala Leu Gln Pro His Pro Pro Glu Ser Ser Met Tyr Lys Tyr Pro 370 375 380

Ser Asp Leu Pro Tyr Met Ser Ser Tyr His Ala His Pro Gln Lys Met 385 390 395 400

Asn Phe Val Ala Pro His Pro Pro Ala Leu Pro Val Thr Ser Ser Ser 405 410 415

Phe Phe Ala Ala Pro Asn Pro Tyr Trp Asn Ser Pro Thr Gly Gly Ile 420 425 430

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<212> DNA

<400> 3

<213> c-erg gene, chicken DNA

<211> 478

<212> PRT

<213> protein sequence from c-erg gene

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Ser Leu Phe Glu Cys Ala Tyr Gly Ser Pro His Leu Ala Lys Thr Glu

Met Thr Ala Ser Ser Ser Ser Glu Tyr Gly Gln Thr Ser Lys Met Ser 35 40 45

Pro Arg Val Pro Gln Gln Asp Trp Leu Ser Gln Pro Pro Ala Arg Val 50 55 60





Thr Ile Lys Met Glu Cys Asn Pro Asn Gln Val Asn Gly Ser Arg Asn 65 70 75 80

Ser Pro Asp Asp Cys Ser Val Ala Lys Gly Gly Lys Met Val Ser Ser 85 90 95

Ser Asp Asn Val Gly Met Asn Tyr Gly Ser Tyr Met Glu Glu Lys His 100 105 110

Ile Pro Pro Pro Asn Met Thr Thr Asn Glu Arg Arg Val Ile Val Pro 115 120 125

Ala Asp Pro Thr Leu Trp Ser Thr Asp His Val Arg Gln Trp Leu Glu 130 135 140

Trp Ala Val Lys Glu Tyr Gly Leu Pro Asp Val Asp Ile Leu Leu Phe 145 150 155 160

Gln Asn Ile Asp Gly Lys Glu Leu Cys Lys Met Thr Lys Asp Asp Phe 165 170 175

Gln Arg Leu Thr Pro Ser Tyr Asn Ala Asp Ile Leu Leu Ser His Leu 180 185 190

His Tyr Leu Arg Glu Thr Pro Leu Pro His Leu Thr Ser Asp Asp Val 195 200 205

Asp Lys Ala Leu Gln Asn Ser Pro Arg Leu Met His Ala Arg Asn Thr 210 215 220

Gly Gly Ala Thr Phe Ile Phe Pro Asn Thr Ser Val Tyr Pro Glu Ala 225 230 235 240

Thr Gln Arg Ile Thr Thr Arg Pro Asp Leu Pro Tyr Glu Gln Ala Arg 245 250 255

Arg Ser Ala Trp Thr Ser His Ser His Pro Thr Gln Ser Lys Ala Thr 260 265 270

Gln Pro Ser Ser Ser Thr Val Pro Lys Thr Glu Asp Gln Arg Pro Gln 275 280 285

Leu Asp Pro Tyr Gln Ile Leu Gly Pro Thr Ser Ser Arg Leu Ala Asn 290 295 300

Pro Gly Ser Gly Gln Ile Gln Leu Trp Gln Phe Leu Leu Glu Leu Leu 305 310 315 320

M

Ser Asp Ser Ser Asn Ser Asn Cys Ile Thr Trp Glu Gly Thr Asn Gly 335 330 Glu Phe Lys Met Thr Asp Pro Asp Glu Val Ala Arg Arg Trp Gly Glu 345 340 Arg Lys Ser Lys Pro Asn Met Asn Tyr Asp Lys Leu Ser Arg Ala Leu 365 360 355 Arg Tyr Tyr Tyr Asp Lys Asn Ile Met Thr Lys Val His Pro Pro Glu 380 375 370 Ser Ser Met Tyr Lys Tyr Pro Ser Asp Leu Pro Tyr Met Ser Ser Tyr 390 395 385 His Gly Lys Arg Tyr Ala Tyr Lys Phe Asp Phe His Gly Ile Ala Gln 410 405 Ala Leu Gln Pro His Ala His Pro Gln Lys Met Asn Phe Val Ala Pro 430 425 420 His Pro Pro Ala Leu Pro Val Thr Ser Ser Ser Phe Phe Ala Ala Pro 440 445 435 Asn Pro Tyr Trp Asn Ser Pro Thr Gly Gly Ile Tyr Pro Asn Thr Arg 455 Leu Pro Ala Ala His Met Pro Ser His Leu Gly Thr Tyr Tyr 475 470 465 <210> 5 <211> 23 <212> DNA <213> primer for isolation of C-11 and c-erg genes <400> 5 23 atcttgatca cattatggca agc <210> 6 <211> 25 <212> DNA <213> primer for isolation of C-11 and c-erg genes <400> 6 25

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